Catalogue of American Amphibians and Reptiles.

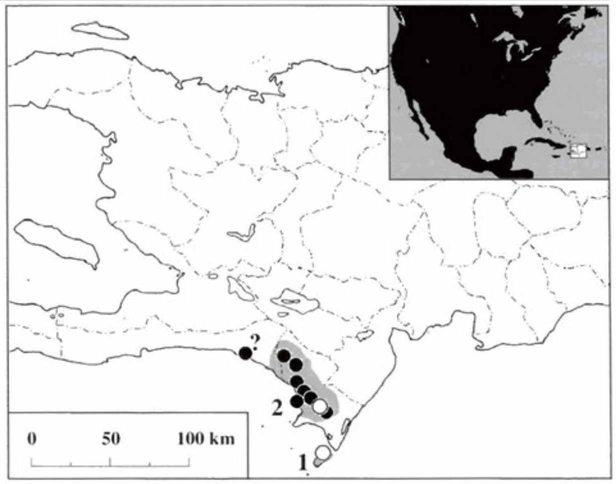
Gifford, M.E. and R. Powell. 2002. *Anolis longitibialis*.

Anolis longitibialis Noble

Anolis longitibialis Noble 1923:4. Type locality, "Beata Island, Dominican Republic." Holotype, American Museum of Natural History (AMNH) 24329, an adult male, collected by G.K. Noble, 3 October 1922 (not examined by authors).
Anolis cybotes longitibialis: Cochran 1934:168. See **Comment**.
Ctenonotus longitibialis: Schwartz and Henderson 1988:113. See **Remarks**.

• **CONTENT.** Two subspecies, *Anolis l. longitibialis* and *A. l. specuum*, are currently recognized (but see **Remarks**).

• **DEFINITION.** *Anolis longitibialis* is a moderately sized cybotoid anole; maximum known SVL of males is 72 mm and females reach 59 mm. The following combination of features (Noble 1923, Schwartz 1989, Schwartz and Henderson 1991) characterize this species (N = 115): 4–6 (mode 5) rows of loreals; 0–1 (mode 0) scales between supraorbitals; 0–2 (mode 1) scales between interparietals and supraorbital semicircles; 0–1 (mode 1) rows of scales between supralabials and suboculars; 3–5 (mode 4) postrostrals; 2–9 (mode 6) postmentals; dorsals granular, flattened, and small; median row of dorsal scales enlarged and continuing onto tail; ventral scales smooth; supradigital scales smooth to somewhat unicarinate; fourth toe lamellae 14–21; tail short, verticillate, compressed, with seven vertical rows per verticil, and with three enlarged middorsals per verticil.



MAP. Distribution of *Anolis longitibialis* (modified from Schwartz and Henderson 1991). The circles mark type localities and dots indicate other records. The question mark indicates a specimen not assigned subspecifically.





FIGURE 1. Adult male (top) and female *Anolis longitibialis* (right) from 3.1 km south of Los Tres Charcos, Provincia de Pedernales, República Dominicana.

Dorsal ground color is grayish brown to grayish tan in both sexes, usually with at least some indication of four darker brown dumbbells on the body (these tend to be more conspicuous in females). The body often has many darker longitudinal streaks and dots. A gray flank stripe is often absent or seen only along the extreme lateral edges of the dumbbell-shaped figures or their remnants. Lower sides are sometimes greenish. A pale narrow subocular crescent and a dark postocular U are present at times (by subspecies). The venter is creamy to white. The throat is usually immaculate in adult males and longitudinally streaked with gray in females.

• **DIAGNOSIS.** *Anolis longitibialis* may be distinguished from other Hispaniolan cybotoid anoles by the following set of characteristics (Henderson and Schwartz 1984, Schwartz 1989): smooth ventrals (keeled in *A. whitemani* and *A. shrevei*), yellowish/dirty yellow dewlap (orange to orange-brown in *A. strahmi*), no postocular spot (black postocular spot or blotch in *A. armouri* and *A. marcanoi*), and 1/1 scales between supraorbital semicircles and interparietals (usually 2/2 in *A. cybotes*).

• **DESCRIPTIONS.** In addition to the original description by Noble (1923) and Schwartz (1979), detailed descriptions are in Cochran (1941), Schwartz (1989), and Schwartz and Henderson (1991).

• **ILLUSTRATIONS.** Cochran (1941) provided line drawings of dorsal and lateral views of the head, middorsal scales, and side of the tail.

• **DISTRIBUTION.** A Hispaniolan, "South Paleoisland" endemic (Schwartz 1980, Powell et al. 1999), the species is found in xeric lowlands on the Península de Barahona and on shrubs and cliff faces on Isla Beata (Schwartz and Henderson 1991). The range was illustrated in Schwartz (1989) and Schwartz and Henderson (1991).

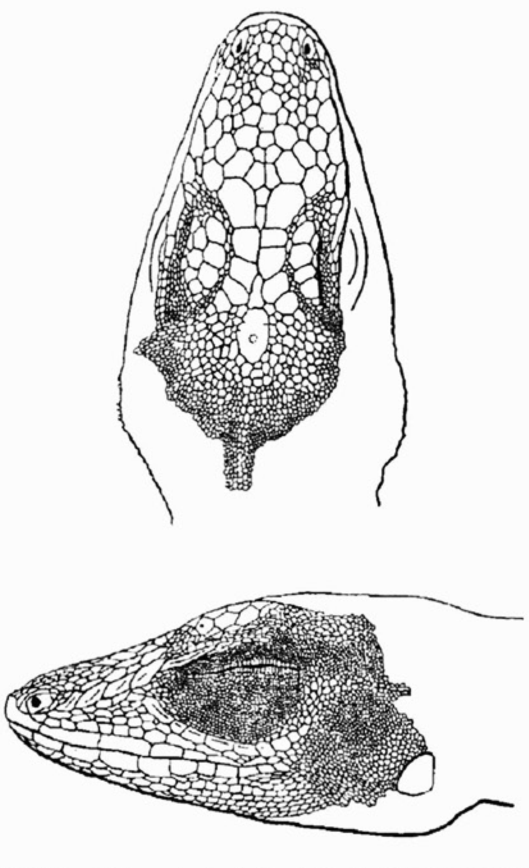


FIGURE 2. Adult male *Anolis longitibialis* (USNM 83880)(from Cochran 1941).

• **FOSSIL RECORD.** None.

• **PERTINENT LITERATURE.** References to *Anolis longitibialis* are arranged by topic: **systematics** (Cochran 1941, Schwartz 1989, Burnell and Hedges 1990), **comparative morphology** (body size: Schoener 1988; subdigital lamellae: Glossip and Losos 1997; dewlap size: Losos and Chu 1998), **ecomorphology** (Williams 1983, Case and Williams 1987, Schoener 1988, Irschik and Losos 1996, Irschick et al. 1997, Losos and de Queiroz 1997, Beuttell and Losos 1999, Losos et al. 2001), **habitat** (Westermann 1953, SEA/DVS 1990), **natural history** (Gifford et al. 2002), **thermal biology** (Hertz and Huey 1981).

This species is included in **guides, checklists, keys, and notes** by Barbour and Loveridge (1929), Barbour (1930, 1935,1937), Cochran (1934), Schwartz and Thomas (1975), MacLean et al. (1977), Williams (1976, 1977), Henderson and Schwartz (1984), Henderson et al. (1984), Schwartz and Henderson (1985, 1988), O'Hare and Williams (1994, see also Williams et al. 1995), Frank and Ramus (1995), Fläschendräger and Wijffels (1996), and Powell et al. (1996, 1999).

• **REMARKS.** Powell (1993) listed *Anolis longitibialis specuum* among Hispaniolan subspecies possibly deserving recognition as a full species.

Guyer and Savage (1986 [1987]) elevated the anoline genus *Ctenonotus*, into which they (Savage and Guyer 1989) placed *Anolis longitibialis*. Although the recognition of the genera elevated by Guyer and Savage (1986 [1987]) has been strongly advocated by some workers (e.g., Vitt and Zani 1996), we prefer a more conservative approach until concerns regarding generic relationships among anoles (e.g., Williams 1989) have been addressed.

• **ETYMOLOGY.** The name *longitibialis* is derived from the Latin *longus* and *tibia*, meaning "long shinbone," obviously a reference to Noble's (1923) statement that this species differs from *A. cybotes* in "its much longer hind limb." The name *specuum* is from the Latin for "of crevices or caves" and alludes to the crevice-dwelling habits of this subspecies (Schwartz 1979).

• **COMMENT.** Because this taxon was considered a subspecies of *Anolis cybotes* for many years, some pertinent literature may be indistinguishably incorporated in references to that taxon.

1. *Anolis longitibialis longitibialis* Noble

Anolis longitibialis Noble 1923:4. See species synonymy.
Anolis cybotes longitibialis: Cochran 1934:168. See species synonymy.
Anolis longitibialis longitibialis: Schwartz 1979:9. First use of trinomial.
Ctenonotus longitibialis longitibialis: Schwartz and Henderson 1988:113. See **Remarks**.

• **DEFINITION.** This subspecies is characterized by the following combination of characters (Schwartz 1979, N = 43): small size (males to 67 mm SVL, females to 57 mm), small dorsal (39–57 in one head length) and ventral scales (29–51 in one head length), and modally 4 postrostral scales. Dorsal coloration is grayish tan to gray brown with a series of longitudinal fine dark brown lines, dashes, or dots without dark dumbbells.

Lower sides are greenish in males. The truncated occipital U may be indicated but is usually absent, and the fine diagonal temporal line is present but faint or fragmented. The dewlap is dirty yellow to orange posteriorly, or yellow to very pale orange or very dull yellow.

2. *Anolis longitibialis specuum* Schwartz

Anolis longitibialis specuum Schwartz 1979:6. Type locality, "17 km NW of Oviedo Nuevo, Pedernales Province, República [Dominicana], 183 m." Holotype, Museum of Comparative Zoology (MCZ) 132370 (original number RT 3461), an adult male, collected by R. Thomas, 7–8 August 1975 (not examined by authors).

Ctenonotus longitibialis specuum: Schwartz and Henderson 1988:113. See **Remarks**.

• **DEFINITION.** This subspecies is characterized by the following combination of characters (Schwartz 1979): large size (males to 72 mm SVL, females to 59 mm), large dorsal (35–52 in one head length) and ventral scales (31–52 in one head length), and usually 4–5 postrostrals. The dorsal coloration is brown with four transverse dumbbells and often one pair of sacral blotches. The throats of females are almost always streaked longitudinally with dark brown (but streaks are very rare in adult males). The dewlap is very pale orange to pale or dirty yellow.

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